

Date: Mon, 6 Dec 93 04:30:21 PST  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V93 #134  
To: Ham-Ant

Ham-Ant Digest                      Mon, 6 Dec 93                      Volume 93 : Issue 134

Today's Topics:

50 ohm coax to 75 ohm coax transformer (2 msgs)  
    electrical codes  
    First antenna for 160 meters  
    Phone No. for Andrew Cable wanted.  
    Rugged 2 meter antenn (2 msgs)  
    What is a beverage antenna? (2 msgs)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Thu, 2 Dec 1993 17:01:24 GMT  
From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!usenet.ins.cwru.edu!  
news.ecn.bgu.edu!willis1.cis.uab.edu!spam.dom.uab.edu!user@ames.arpa  
Subject: 50 ohm coax to 75 ohm coax transformer  
To: ham-ant@ucsd.edu

> Michael A Cecere (mac20@namaste.cc.columbia.edu) wrote:  
> : oh yeah, at 900MHz. would this be terribly complicated to homebrew?  
>  
> : I want to go from f-type connector 75-ohm "cable" coax to, get this,  
> : 9913 N-type coax. (the section of 75 ohm is just to match to the transceiver,  
> : the 9913 has to run over 100')

An alternative for long runs for low loss is to go to twin lead,  
using a 4:1 balun and a quarter wave impedance matching twin lead.  
I recognize this is something completely different, and may not work  
at all in the application.

I used such a system for feeding an antenna suspended from a balloon 200 feet up and it worked nicely. The impedance matching section of twin lead was made of two pieces of 1/4 inch OD copper tubing held one inch apart on center. The 4:1 balun transformed the impedance from 50 to 200 ohm, and the quarter wave transformer matched 200 to 300 ohms. The graph of impedance vs. wire spacing is in the ARRL handbook.

Steve Holland

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Date: Thu, 2 Dec 1993 17:04:50 GMT  
From: nnntp.ucsb.edu!library.ucla.edu!agate!howland.reston.ans.net!  
usenet.ins.cwru.edu!news.ecn.bgu.edu!willis1.cis.uab.edu!spam.dom.uab.edu!  
user@network.ucsd.edu  
Subject: 50 ohm coax to 75 ohm coax transformer  
To: ham-ant@ucsd.edu

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> : the 9913 has to run over 100')

Another thought is to go from 50 ohm coax to a 4:1 quarter wave balun to 200 ohm, connect to a quarter wave section of 1/4 inch copper tubing spaced 1 inch center to center, which will bring you to 300 ohms, then through another 4:1 quarter wave balun to 75 ohm.

Steve Holland

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Date: Sat, 4 Dec 1993 06:28:38 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!math.ohio-state.edu!  
darwin.sura.net!spool.mu.edu!agate!iat.holonet.net!pubcon!  
brian.oakley@network.ucsd.edu  
Subject: electrical codes  
To: ham-ant@ucsd.edu

hi, tom.

i used to work as an electrician and from what i understood was that all local codes had to AT LEAST meet nec codes, but can exceed them with extra requirements if deemed necessary. ive been out of the business for about 8 years so it could have changed since then. someone

enlighten me please. 73 brian. wb5kxw

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Date: 2 Dec 1993 17:06:44 GMT  
From: nntp.ucsb.edu!library.ucla.edu!agate!howland.reston.ans.net!pipex!uknet!  
doc.ic.ac.uk!bright.ecs.soton.ac.uk!pdh@network.ucsd.edu  
Subject: First antenna for 160 meters  
To: ham-ant@ucsd.edu

I realise this isn't one bit helpful but ;^)  
My first 160m antenna was an indoor dipole.

(honest!)

--  
Peter Harris    G4BDQ    |                    Unusual exploding disclaimer    ->    ({}|){//)  
Fibre Optics \*-----|----- (---PAF !-)  
Southampton University|                    "Get those feet dancin'"                    (/{}|{}\\)  
pdh@ecs.soton.ac.uk    |                    Geoffrey Boycott                    |||

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Date: 3 Dec 1993 10:07:55 CST  
From: ftpbox!mothost!schbbs!maccvm.corp.mot.com!CSLE87@uunet.uu.net  
Subject: Phone No. for Andrew Cable wanted.  
To: ham-ant@ucsd.edu

The phone numbers for Andrew are 1-800-255-1479 or 708-349-3300

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Date: Sun, 5 Dec 1993 10:10:08 GMT  
From: mentor.cc.purdue.edu!sage.cc.purdue.edu!blumb@purdue.edu  
Subject: Rugged 2 meter antenn  
To: ham-ant@ucsd.edu

In article <931204075944230@pubcon.fort-worth.tx.us> brian.oakley@pubcon.fort-worth.tx.us (BRIAN OAKLEY) writes:

>anyone ever uses a mag mount 5/8 wave 2 meter whip stuck on a bike book  
>rack? looks like this would work ok. i have not tried this yet but  
>seems a simple way to put an antenna on a bicycle. 73 wb5kxw

It'll work ok, if you don't mind a little RF danger.

--

Bill Blum N9VLS blumb@sage.cc.purdue.edu Purdue University, W. Lafayette, IN  
Reality is for those who can't handle subscribing to IASFM and Model Railroader

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Date: Sat, 4 Dec 1993 06:19:29 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!agate!  
iat.holonet.net!pubcon!brian.oakley@network.ucsd.edu  
Subject: Rugged 2 meter antenn  
To: ham-ant@ucsd.edu

anyone ever uses a mag mount 5/8 wave 2 meter whip stuck on a bike book  
rack? looks like this would work ok. i have not tried this yet but  
seems a simple way to put an antenna on a bicycle. 73 wb5kxw

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Date: 6 Dec 93 00:02:38 GMT  
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu  
Subject: What is a beverage antenna?  
To: ham-ant@ucsd.edu

In article <1993Dec2.192459.20436@dale.ksc.nasa.gov> rsumperl@dale.ksc.nasa.gov  
(Ray Sumperl) writes:

> Can someone please post or email me what a beverage antenna is?

The Beverage is of a class of antennas called travelling wave antennas.  
It's primarily a receiving antenna for use at MW frequencies. It's normally  
very long, 8-10 wavelengths, mounted close to the ground, about 2 meters,  
and terminated at the far end in a resistance, typically 500-1000 ohms  
depending on ground conductivity. It is directional in the direction  
toward the termination, and it favors low angle radiation. It depends on  
the proximity to fairly poorly conductive soil to achieve the wave bending  
needed for it's travelling wave action. It has excellent suppression of  
high angle radiation, off axis radiation, and atmospheric and manmade noise.

Gary

--

Gary Coffman KE4ZV	Where my job's going,	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	I don't know. It might	uunet!rsiatl!ke4zv!gary
534 Shannon Way	wind up in Mexico.	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-NAFTA Blues	

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Date: Thu, 2 Dec 1993 19:24:59 GMT  
From: dale.ksc.nasa.gov!rsumperl@ames.arpa

Subject: What is a beverage antenna?  
To: ham-ant@ucsd.edu

Greetings all...

Can someone please post or email me what a beverage antenna is?

Thanks,  
Ray

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Date: Thu, 02 Dec 1993 20:30:26 GMT  
From: mustang.mst6.lanl.gov!nntp-server.caltech.edu!news.claremont.edu!  
paris.ics.uci.edu!csulb.edu!library.ucla.edu!agate!usenet.ins.cwru.edu!  
magnus.acs.ohio-state.edu!csn!yuma!@nntp.ucsb.edu  
To: ham-ant@ucsd.edu

References <1993Dec2.012544.22087@news.unr.edu>,  
<1993Dec2.150441.24957@news.cs.tut.fi>, <2d17b4\$5oh@bright.ecs.soton.ac.uk>du  
Subject : Re: First antenna for 160 meters(continuously loaded???)

I've thought about a continuously loaded (read: slinky style) vertical  
or possibly a cont loaded dipole for 160. The dipole version could  
be made small enough to rotate! Has anyone done something like this  
beyond the sparse articles in ARRL literature????

Just wondering,  
Galen, KF0YJ

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End of Ham-Ant Digest V93 #134  
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